

**Commonwealth of Kentucky
Division for Air Quality**

PERMIT APPLICATION SUMMARY FORM

Completed by: Sreenivas Kesaraju

GENERAL INFORMATION:

Name:	Dart Polymers, Inc.
Address:	2400 Harbor Road, Owensboro, Ky., 42301
Date application received:	December 01, 1998
SIC/Source description:	2821
AFS(10-digit) Plant ID:	21-059-00131
EIS #:	072-0920-0131 (old)
Application log number:	F872/G570
Permit number:	V-00-003

APPLICATION TYPE/PERMIT ACTIVITY:

<input type="checkbox"/> Initial issuance	<input type="checkbox"/> General permit
<input type="checkbox"/> Permit modification	<input type="checkbox"/> Conditional major
__Administrative	<input checked="" type="checkbox"/> Title V
__Minor	<input checked="" type="checkbox"/> Synthetic minor
__Significant	<input type="checkbox"/> Operating
<input type="checkbox"/> Permit renewal	<input type="checkbox"/> Construction/operating

COMPLIANCE SUMMARY:

<input type="checkbox"/> Source is out of compliance	<input type="checkbox"/> Compliance schedule included
<input checked="" type="checkbox"/> Compliance certification signed	

APPLICABLE REQUIREMENTS LIST:

<input type="checkbox"/> NSR	<input checked="" type="checkbox"/> NSPS	<input checked="" type="checkbox"/> SIP
<input type="checkbox"/> PSD	<input checked="" type="checkbox"/> NESHAPS	<input type="checkbox"/> Other
<input checked="" type="checkbox"/> Netted out of PSD/NSR	<input type="checkbox"/> Not major modification per 401 KAR 51:017, 1(23)(b) or 51:052,1(14)(b)	

MISCELLANEOUS:

- ☐ Acid rain source
- ☐ Source subject to 112(r)
- ☐ Source applied for federally enforceable emissions cap
- ☒ Source provided terms for alternative operating scenarios
- ☒ Source subject to a MACT standard
- ☐ Source requested case-by-case 112(g) or (j) determination
- ☐ Application proposes new control technology
- ☒ Certified by responsible official
- ☐ Diagrams or drawings included
- ☐ Confidential business information (CBI) submitted in application
- ☐ Pollution Prevention Measures
- ☐ Area is non-attainment (list pollutants):

EMISSIONS SUMMARY:

POLLUTANT	ACTUAL (TPY)	POTENTIAL (TPY)
PM	N/A	N/A
SO ₂	N/A	N/A
NO _x	N/A	N/A
CO	N/A	N/A
VOC	100.642	459.44
LEAD	N/A	N/A
HAP \geq 10 tpy (by CAS)		
100-42-5 (Styrene)	52.67	52.67

SOURCE PROCESS DESCRIPTION:

Dart Polymers, Inc (“Dart”) owns and operates a polystyrene beads, and pellets manufacturing plant and an impregnation facility in Owensboro, Kentucky. This source is a major source for VOC’s and HAP’s. The primary activity at the Owensboro facility is the polymerization of polystyrene, which falls under SIC code 2821. There are three primary production processes at the facility. They are Polystyrene Pellets (Mass Plant), Impregnated Polystyrene beads, Polystyrene Beads (Suspension Plant).

The Mass Plant and the Suspension Plant come under the provisions of 40 CFR 63, Subpart JJJ – *National Emission Standards for Hazardous Air Pollutant Emissions, Group IV Polymers and Resins*.

Dart is a “Existing Affected Source” under Subpart JJJ and the compliance date of September 12, 1999 for Subpart JJJ has been stayed indefinitely except for the “Equipment Leak Provisions”. This is stated in the Section D of the permit – Source Emission Limitations and Testing Requirements. The permit also requires Dart to comply with the new compliance date when published by EPA in the Federal Register.

EMISSION AND OPERATING CAPS DESCRIPTION:

Dart has applied for a debottlenecking project in the Impregnation Plant, which is included in this review. The potential to emit from this project exceeded 40 TPY, which triggered the requirements of 401 KAR 51:017, Prevention of significant Deterioration (PSD). However, Dart has proposed to take a limit of 10.51 TPY from this modification to preclude from the applicability of PSD. This modification is being issued as a synthetic minor permit, limiting the emissions from this project to 10.51 TPY.

OPERATIONAL FLEXIBILITY:

The batch reactors in the Polystyrene Pellets Production Plant will vent through their dedicated vents (Not through the Anti-Oxidant tank as listed in the Section B of the permit). This will be done on regular basis or when bringing process systems down. All the requirements including the applicability of 40 CFR 63, Subpart JJJ and the emission limits will continue to apply as described on Pages 2 through 5 of the permit.